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EXAMPLE 25

5.753 g of a PVA solution as described in Example 12 which has been coloured with Remazol Schwarz B are stirred with a solution of 10.7 mg of Irgacure 2959 (0.5% by weight based on the polymer) in 1.400 g of water, transferred into moulds and crosslinked as described in Example 17 to give a coloured hydrogel.

EXAMPLE 26

7.002 g of a PVA solution as described in Example 12 which has been coloured with Remazol Schwarz B are stirred with a solution of 26.1 mg of Irgacure 2959 (1.0% by weight based on the polymer) in 1.704 g of water, transferred into moulds and crosslinked as described in Example 17 to give a coloured hydrogel.

Table 6 below shows the water content, the transmission, the wavelength and the central thickness of the contact lenses produced in Examples 17 to 26.

TABLE 6

Ex.	Water content a) [%]	Transmission b) [%]	Wavelength [nm]	Central thickness [μm]
17	65	62	672	105
18	66	74	672	95
19	66	78	553	83
20	65	65	592	100
21	65	90	596	65
22	66	86	553	91
25	66	66	592	95
26	65	64	592	105

a) ±2%

b) ±5%

EXAMPLE 27

(Comparative example—untinted lenses) A PVA solution as in Example 2 containing the acetal as in Example 1 was mixed with Irgacure 2959 and crosslinked analogously to Example 17. Water content 67±2%; transmission 400–800 nm >90%.

What is claimed is:

1. A process for the production of crosslinked tinted mouldings, which comprises the following steps:

- preparation of an essentially aqueous solution of a water-soluble crosslinkable tinted polymer comprising units containing a crosslinkable group and units containing a bonded reactive dye radical,
- introduction of the resultant solution into a mould,
- initiation of the crosslinking in water or in an organic solvent in which the crosslinkable tinted polymer is dissolved, and
- opening of the mould so that the moulding can be removed.

2. A process according to claim 1, wherein the mouldings are contact lenses.

3. A process according to claim 1, wherein the water-soluble crosslinkable tinted polymer of step a) is derived from a starting polymer containing, on or in the polymer chain, a functional group which can react with a reactive dye.

4. A process according to claim 3, wherein the water-soluble crosslinkable tinted polymer of step a) is derived from polyvinyl alcohol.

5. A process according to claim 3, wherein the water-soluble crosslinkable tinted polymer of step a) comprises

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units in the polymer chain which are derived from the following monomer units: a vinyl lactam, vinyl alcohol, if desired a vinyl (lower alkane)carboxylate, a vinylic crosslinking agent and, if desired, a vinylic photoinitiator.

6. A process according to claim 5, wherein the polymer is a terpolymer of vinylpyrrolidone, vinyl acetate and vinyl alcohol.

7. A process according to claim 1, wherein the essentially aqueous solution of the water-soluble crosslinkable tinted polymer is free or essentially free from undesired constituents, such as, in particular from monomeric, oligomeric or polymeric starting compounds used for the preparation of this polymer, or from by-products formed during the preparation of this polymer, or from impurities present in the reactive dyes.

8. A process according to claim 1, wherein the essentially aqueous solution of the water-soluble crosslinkable tinted polymer is used without addition of a comonomer, in particular a vinylic comonomer.

9. A process according to claim 1, wherein an initiator for the crosslinking is added to the solution of the water-soluble, crosslinkable tinted polymer.

10. A process according to claim 1, wherein the crosslinking is not followed by extraction in order to remove undesired constituents.

11. A process according to claim 1, wherein the reactive dye is covalently bonded to the polymer backbone either directly via an ether, thioether, amino or amido group or via a bivalent or trivalent bridge.

12. A process according to claim 11, wherein the bridge is a trivalent bridge derived from an ω-amino-C₁–C₁₂alkylaldehyde acetal.

13. A process according to claim 1, which comprises the following steps:

- preparation of an essentially aqueous solution of a water-soluble crosslinkable tinted polymer comprising units containing a crosslinkable group and units containing a reactive dye radical covalently bonded to the polymer backbone either directly or via a bridge, which solution is free or essentially free from undesired constituents, such as, in particular, from monomeric, oligomeric or polymeric starting compounds used for the preparation of this polymer or from by-products formed during the preparation of this polymer, or from impurities present in the reactive dyes, and is used without addition of a comonomer,
- introduction of the resultant solution into a mould,
- initiation of the crosslinking, and
- opening of the mould so that the moulding can be removed.

14. A process according to claim 13, wherein the mouldings are tinted contact lenses.

15. A process according to claim 14 for the production of a contact lens, wherein the essentially aqueous solution is a purely aqueous solution or a solution in an artificial, preferably buffered, tear fluid.

16. A process according to claim 14 for the production of a tinted contact lens, wherein a crosslinking initiator is added to the solution, and the crosslinking takes place by photocrosslinking.

17. A tinted moulding, in particular a tinted contact lens, obtainable by a process according to claim 1.

18. A tinted contact lens according to claim 17, which is suitable for its intended use without extraction.

19. A tinted contact lens obtainable according to claim 14, which is suitable for its intended use without extraction.

20. A crosslinkable tinted polymer comprising units containing a crosslinkable group of the formula I